STATE ENDANGERED

Black Racer (Coluber constrictor)

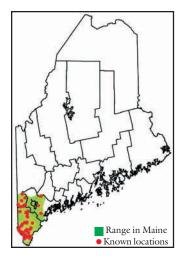


Description

The experience of having a large black snake slithering out from underfoot has given many a startle in southern Maine. This, the largest of Maine's snakes, is lightning fast. The black racer or eastern racer can grow up to six feet long. The adult is uniformly black to bluish-black with shiny, smooth scales, and has a white chin, neck, and throat. The underside is pale to medium gray. A thin white line extends from the snout over the eye to the neck and is only observable at close range. The juvenile is gray or bluish gray with a patterned row of dark gray, brown, or reddish brown blotches along the top of the back; dark spots on flanks and underside; and an unpatterned tail. As the snake matures, the patterned blotches fade, the dorsal surface darkens, and all patterning disappears by the time the snake reaches 30 inches long.

Range and Habitat

Racers occur across most of the United States



except the Southwest. The northern black racer, *Coluber constrictor constrictor*, is the subspecies in Maine. The species is at the northern extent of its range in Maine. Although it was common as far north as Cobboseecontee Lake in the 1930s, the black racer is now rare, and its range is limited to York, Cumberland, and southern Oxford counties.

The black racer occurs in a variety of moist and dry habitats, including deciduous and coniferous forests, fields, woodlands interspersed with fields, and swamps or marshes. In southern Maine, open grasslands, power line rights-of-way, orchards, rocky ridges, and the edges between forests and fields seem to be preferred habitats.

Life History and Ecology

Racers reach sexual maturity in August and September when they are just over a year old, but do not mate until the following spring. Mating occurs in May to early June. Pheromones released by a female may attract several males. In the East, egg laying occurs from early June to early August. Clutch size ranges from 2-31, although 9-16 is most common. Favored nesting sites include mammal burrows, rotting logs and stumps, and sawdust piles. Individuals typically nest singly, although communal nesting occurs occasionally. Incubation lasts 43-65 days depending on temperature. Hatching occurs from late July to September.

Despite their scientific name, racers do not kill by constriction, but bite and hold their prey. Typical prey includes frogs, toads, small birds and their eggs, small mammals, insects, and other snakes. In the Northeast, small mammals and snakes are the primary prey.

Black racers are territorial and have an average home range size of 30 acres. They are active from March to October, although they also may become active during warm winter days. Winter hibernation sites include mammal burrows, caves, rock crevices, gravel banks, and rotting logs and stumps. Racers show high fidelity to winter hibernacula and may

• Maine's Endangered and Threatened Wildlife

©2003 Maine Department of Inland Fisheries & Wildlife •

hibernate communally with other snake species. They may live to be over 10 years old. As their name implies, they are a fast snake, and if pursued they often escape by climbing into low branches and bushes.

Threats

Black racers are still locally common throughout New England, but are declining in some areas. The racer is at high risk of extirpation in Maine because of a drastic reduction in range, rarity at the northern edge of its range, and habitat loss. Historic accounts suggest the racer was formerly more abundant and widespread in Maine. At the height of farming in Maine, the species ranged farther north to the Belgrade Lakes area. Its numbers and range declined drastically as agricultural land reverted to forest land or was developed. Habitat fragmentation resulted in shrinking patches of habitat that no longer support a viable population of these snakes. Increased road density and traffic results in mortality. Racers also are killed by people and pets when they appear in yards. In Maine, at the northern edge of the racer's range, cold temperatures may limit survival of eggs and overwintering of adults.

Conservation and Management

The black racer was listed as endangered in Maine in 1986 because of its reduced range and small population. A few racers are sporadically reported from southern Maine each year. Recurring records of racers are limited to only three locations in York County: agricultural land in Alfred and sandplain grasslands at Wells Barrens and the Kennebunk Plains. Racers seem to do well in blueberry and grassland habitats if such areas are not fragmented. Effective conservation of racers will require conserving large blocks of unfragmented, rural, agricultural lands. Habitat protection is the most important means of conserving the species in the state.

Other recovery techniques may include providing supplemental hibernation structures and nesting areas in suitable habitat. Reintroduction techniques have not been developed, and snakes from source populations to the south may not be well-adapted for life in the North. Very little is known about the life history of racers in Maine, and studies of habitat use, movements, and ecology are needed. It is illegal to collect, possess, or kill a black racer because of protection provided by its endangered status. consult with a biologist from MDIFW to assist with planning.

✓ Municipalities should strive to maintain important habitat areas identified by MDIFW as open space, identify these areas in comprehensive plans, and conserve accordingly.

✓ Use voluntary agreements, conservation easements, conservation tax abatements and incentives, and acquisition to protect important habitat for threatened and endangered species.

✓ Avoid new roads and road improvement projects (e.g., paving, widening) that could lead to increased traffic volume and speed within ¼ mile of known racer occurrences. All road projects should undergo thorough environmental review to avoid, minimize, and mitigate road mortality to endangered snakes.

✓ Avoid human persecution of racers by educating the public about this endangered snake and its protected status, and seek voluntary information on the location of populations. ■

Recommendations: